### **Household projections**

# 1. Purpose

1.1 To inform HARG about upcoming work to improve the method of producing household projections.

### 2. Background

- 2.1 The creation of household projections transferred from Scottish Executive Development Department (DD) to GROS. The software used in the past by DD was overly complicated to use and documentation was out of date. As a short term measure excel was used to produce the 2004 based household projections.
- 2.2 The excel based population projections consisted of multiple linked worksheets. This system is easy to understand and produces the required output however it is difficult to modify and lacks the robustness desired for such a system.
- 2.3 Household projections are created using census data from 1991 and 2001 and projecting forward using a two-point modified exponential curve.

### 3. System redesign and test

- 3.1 In the first half of 2007 a new system to produce the projections will be designed and created using the SAS statistical package. During design care will be taken to ensure the system will be simple to modify for alternative projection methods.
- 3.2 The new projections system will be tested against the previous excel system by recreating the 2004 based household projections.

#### 4. Consider amendments to the projections methodology

- 4.1 We will investigate using of survey data such as the Scottish Household Survey and Labour Force Survey to improve our projections. Due to the small sample size it is likely that these datasets this will only be applicable to projections at a national level.
- 4.2 There is scope to improve our treatment of Communal Establishments in the household projections. Currently we take the proportion of adults in communal establishments from the 2001 census and use this for each year of the projections. Work is currently underway to collect more up to date figures on communal establishments which should improve the quality of our projections.
- 4.3 We will consider changes to age groups and household types and welcome input on this, see HARG PAPER 2007(7).

4.4 We will develop the capability to produce household projections for new geographies, in particular the proposed national parks.

## 5. Produce 2006 based household projections

5.1 The date of production of 2006 based household projections is highly dependent on the review of population projections. It is likely that the 2006 based population projections will be available by December 2007.

#### 6. Conclusion

6.1 HARG members are asked whether they have any comments on the methods used for the Scottish household projections. Household Estimates and projections branch will keep HARG informed of developments.

GROS: Household estimates and projections branch February 2007